

## REMARKS/ARGUMENTS

### **Claim Amendments**

The Applicant has amended no claims. Applicant respectfully submits no new matter has been added. Accordingly, claims 1-3, 5-15 and 17-25 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

### **Regarding the Examiner's Response to Arguments**

The Applicant respectfully contends that the Hadi-Salim reference determines when to send congestion notification messages to a data source (and a second congestion notification can be sent if the packet with the CE bit is dropped due to severe congestion). A basic premise in the present invention is that congestion notification is controlled by determining whether a congestion notification is sent at all.

The CE bit in Hadi-Salim can prevent sending congestion notification (condition 270, Fig. 5B). Instead of preventing congestion notification, the CE bit prevents additional congestion notification messages beyond the congestion notification already sent by the previous router that sent the CE bit. Thus, if a CE bit is set, this means that a congestion notification has already been sent, as opposed to the Applicant's present invention which attempts to prevent congestion notification being sent.

### **Claim Rejections – 35 U.S.C. § 102(e)**

The Examiner rejected claims 1, 3, 5, 12, 14, 15, 17 and 24 under 35 U.S.C. § 102(e) as being anticipated by Hadi-Salim, *et al.* (US 6,625,118 B1), hereinafter Hadi-Salim. The Applicant respectfully traverses the rejection of these claims.

The Hadi-Salim reference discloses a router in a congestion situation providing congestion notification (i.e., ISQ) back to the data source. If the same data flow traverses another router in a congestion situation, a further congestion notification is sent back to the data source for this particular data source. If the same data flow traverses another router in a congestion situation a further congestion notification is sent back to the data source. The functionality of CE bit in Hadi-Salim is to prevent multiple congestion notifications being transmitted for the same data packet back to the

data source (column 6, lines 38-54). With regard to this portion of Hadi-Salim, a CE bit of a packet is set in a router when the router is in a congestion state and an ISQ is sent back to the data source (lines 43-46) and the CE bit is an indication that a congestion notification has already been sent by a previous router (lines 46-49).

With regard to Hadi-Salim, it is clear that a CE bit is not the same as the Applicant's Congestion Notification prevention Information (CNPI) but an indicator that a congestion notification has already been sent (col. 5, 43-46) as there is no single congestion notification sent back to the data source. In contrast to the Applicant's CNPI, Hadi-Salim's CE bit is set by a congested router for a data packet. The Applicant's CNPI which is set by the data source (or proxy) for a data packet depending on a condition notification prevention condition of this data flow (no connection to congestion in a router). the CE bit is not a congestion notification prevention information according to our invention, but an indication that a congestion notification has already been sent (Hadi-Salim column 5 lines 43-46).

Second, the CE bit in Hadi-Salim is set after a congestion notification has already be sent back to the data source, so the intention cannot be that a congestion notification is prevented. Third a congestion notification can be sent by a router even if the CE bit is set, when the packet is dropped at the router (see step 330 in Fig. 5B). Therefore, the CE bit is an indication of "congestion has been experienced and congestion notification has already been performed" with the intention of avoid the transmission of multiple congestion notification messages from successive routers to the same data source.

This is quite different from the Applicant's CNPI which indicates that no congestion notification is to be performed for this data flow by any router, even if any of the routers along the data path is in a congestion situation (due to traffic flow characteristics of the traffic flow that fulfilled the congestion notification prevention condition). The Applicant respectfully contends that the following limitation, present in one form or another in all the independent claims if the present invention, is not present in the Hadi-Salim reference:

"...preventing a performance of a congestion notification at least with respect to the one or more queued data units containing said predetermined information and belonging to a same flow as said queued data units."

A data source can provide information for certain data when, for instance, a data flow is coming to an end that fulfills a congestion notification prevention information (CNPI) is based on the notion that a data source can provide this information for certain data that is triggered by a congestion (page 16, lines 20-28, among others). The intention of the CNPI is that a data source can provide that information for certain data that fulfills a congestion notification prevention condition (e.g., flow coming to an end) so that no congestion control (triggered by congestion notification). Even if congestion is prevalent in the network no congestion notification is sent for those data flows for which congestion notification is to be prevented.

The Applicant respectfully submits that the Hadi-Salim reference fails to disclose at least the limitations as discussed above. These limitations are recited in Applicant's claim 1 and analogous limitations are recited in independent claims 5, 14 and 17. Thus, claims 1, 5, 14 and 17 and the claims dependent therefrom are distinguishable from the Hadi-Salim reference and allowance of these claims is respectfully requested.

#### **Claim Rejections – 35 U.S.C. § 103 (a)**

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hadi-Salim in view of Sindhu, *et al.* (US 7,359,321 B1). The Applicant respectfully traverses the rejection of these claims.

The CE bit disclosed in Hadi-Salim can prevent the sending of congestion notification (condition 270 in Fig. 5B). However, this is not in order to prevent the congestion notification according to a congestion notification prevention condition (indicated by the congestion notification prevention indication), but to prevent additional congestion notification messages being sent beyond the congestion notification that has already been sent by the previous router that also set the CE bit (Hadi-Salim column 5 lines 43-49). This means that a congestion notification has already been sent if a CE bit is set.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable

expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations (MPEP 2143). In that regard, the Applicant respectfully submits that the Examiner's two references still fail to teach or suggest each and every element of the presently pending independent claims.

As discussed above, the base claim 1 contains at least one element which is not found in Hadi-Salim. It is submitted that the Sindhu patent does not provide the missing claim limitations whether considering the references individually or in combination. Thus, the combination of Hadi-Salim and Sindhu does not teach all of the claim elements. Consequently, the Office Action does not factually support a prima facie case of obviousness. The Applicant, therefore, respectfully requests that this rejection be withdrawn.

Claims 6 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hadi-Salim in view of Thoo, et al. (EP 0,955,749 A1). The Applicant respectfully traverses the rejection of these claims

The base claims 5 and 17 contain elements at least one element which is not found in Hadi-Salim. It is submitted that the Thoo patent does not provide the missing claim limitations. Thus, the combination of Hadi-Salim and Thoo does not teach all of the claim elements. Consequently, the Office Action does not factually support a prima facie case of obviousness. The Applicant, therefore, respectfully requests that this rejection be withdrawn.

Claims 7-9 and 19-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hadi-Salim in view of Li, et al. (US 6,741,555 B1). The Applicant respectfully traverses the rejection of these claims

The base claims 5 and 17 contain at least one element which is not found in Hadi-Salim. It is submitted that the Li patent does not provide the missing claim limitations. Thus, the combination of Hadi-Salim and Li does not teach all of the claim elements. Consequently, the Office Action does not factually support a prima facie case

of obviousness. The Applicant, therefore, respectfully requests that this rejection be withdrawn.

Claims 10, 11, 22 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hadi-Salim in view of Brothers, *et al.* (US 6,822,955). The Applicant respectfully traverses the rejection of these claims

The base claims 5 and 17 contain at least one element which is not found in Hadi-Salim. It is submitted that the Brothers patent does not provide the missing claim limitations. Thus, the combination of Hadi-Salim and Brothers does not teach all of the claim elements. Consequently, the Office Action does not factually support a prima facie case of obviousness. The Applicant, therefore, respectfully requests that this rejection be withdrawn.

Claims 13 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hadi-Salim in view of Agrawal, *et al.* (US 7,006,440). The Applicant respectfully traverses the rejection of these claims

The base claims 5 and 17 contain elements which are not found in Hadi-Salim. It is submitted that the Agrawal patent does not provide the missing claim limitations. Thus, the combination of Hadi-Salim and Agrawal does not teach all of the claim elements. Consequently, the Office Action does not factually support a prima facie case of obviousness. The Applicant, therefore, respectfully requests that this rejection be withdrawn.

**CONCLUSION**

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

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